

Translation

PATENT COOPERATION TREATY

PCT/DE2003/002227



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2002P00494WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DE2003/002227	International filing date (day/month/year) 03 July 2003 (03.07.2003)	Priority date (day/month/year) 08 August 2002 (08.08.2002)
International Patent Classification (IPC) or national classification and IPC H05K 3/06		
Applicant SIEMENS AKTIENGESELLSCHAFT		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 15 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☐ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 01 March 2004 (01.03.2004)	Date of completion of this report 27 October 2004 (27.10.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE2003/002227

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1, 3, as originally filed
 pages _____, filed with the demand
 pages 2, 2a, 4, 5, 5a, 6, 6a, 6b, 6c, filed with the letter of 12 October 2004 (12.10.2004)
- ☒ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages 1-4, filed with the letter of 12 October 2004 (12.10.2004)
- ☒ the drawings:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages 1/5-5/5, filed with the letter of 12 October 2004 (12.10.2004)
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☒ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE2003/002227

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 1-4

because:

☐ the said international application, or the said claims Nos. _____
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. _____
are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. _____ are so inadequately supported
by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. _____

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

I. Basis of the report

1. This report has been drawn on the basis of *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

The amendments submitted with the letter of 12 October 2004 introduce substantive matter that, contrary to PCT Article 34(2)(b), goes beyond the disclosure of the international application as filed. The amendments are as follows:

References to the prior art included in the description after the filing date must be limited to a mere reproduction of the facts.

Therefore, the amendments on page 2, lines 18-24 of the description (namely the text passage "which...corresponds") is not admissible (see PCT Guidelines, Part II-4.4).

For the purposes of examining the application, it will be assumed that these amendments have not been submitted.

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III

This report makes reference to the following document:

D1: EP-A-0 530 564 (SIEMENS AG) 10 March 1993 (1993-03-10).

1. Although claim 1 relates to a production method, this claim does not indicate any method steps. An independent claim should specify the inventive features or method steps (see the PCT Guidelines, part 5.33). These features cannot be defined by the general indication "method steps according to a laser structuring method and etching method".

Claim 1 also attempts to define the method in terms of the characteristics of the resist used in the method. These characteristics, however, are not clearly defined. The expression "that correspond at least to those of immersion tin or an amorphous resist" used in claim 1 is vague and unclear and leaves the reader unsure of the meaning of the technical features in question. As a result, the subject matter for which protection is sought is not clearly defined (PCT Article 6).

2. In view of the above objections, a complete examination of the application cannot presently be carried out.

The following, however, should be noted:

D1 discloses (column 2, line 54 to column 3, line 19) a method for producing electrically conductive structures on a carrier for conductive structures, tin

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III

being used as a resist. A resist layer is applied to a metal layer and structured using a laser. Thereafter, the regions of the exposed metal layer are removed by etching.

Owing to the above-mentioned lack of clarity, the subject matter of claim 1 cannot be clearly delimited over the prior art known from D1. It appears, however, that the subject matter of claim 1 does not involve an inventive step.